



Nevada Board for the Regulation of Liquefied Petroleum Gas
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Type 3A COC EXAM INFORMATION

Section 1

Reference books allowed to be used:

None

Main areas of knowledge to be tested:

Properties of LP-Gas
Appliance operation and repair

Number of questions:

Minimum of 50

Sample test questions:

Sample Question 1

How many BTU's per pound of propane liquid?_____

Sample Question 2

LP-Gas in its natural state is odorless:

- A) True
- B) False

Sample Question 3

A direct vent appliance acquires combustion air from:

- A) The room it occupies
- B) The plenum
- C) The outside atmosphere
- D) The draft diverter

Section 2

Reference books allowed to be used:

All reference books are allowed, however, the exam is primarily based on the following:

NFPA 58 (2004) and NFPA 54 (2006) (*The board does NOT provide reference books*)

Main areas of knowledge to be tested:

Appliance installation and repair
Piping installation and sizing
Appliance venting

Number of questions:

Minimum of 50

Sample test questions:

Sample Question 4

You are asked to install a 45,000 btu standard gas wall furnace in a 12 ft. x 12 ft. x 8 ft. bedroom where all combustion and circulating air is obtained from the bedroom. Can you install it?

- A) Yes
- B) No

Sample Question 5

You are installing a gas refrigerator in the kitchen of a customer's cabin. The refrigerator was provided by the customer and they did not provide the manufactures installation instructions to you. What is the minimum distance required between the back of the refrigerator and the wall?

- A) 0 in.
- B) 6 in.
- C) 4 in.
- D) 2 in.

Sample Question 6

You are troubleshooting a customer installed 33,000 BTU water heater that is sooting up. It is installed at sea level and the gas pressure is 11 inches water column. You suspect that the main burner orifice is sized for use with natural gas. What size orifice is required for use with LP-Gas?

- A) 53
- B) 62
- C) 44
- D) 52

QUALIFIED PERSON (QP) ENDORSEMENT

All persons who will be designated as the qualified person for the licensee will also be required to successfully complete the QP exam.

Reference books allowed to be used:

All reference books are allowed, however, the exam is based on the following:

NRS 590.465 to 590.645 and NAC 590.100 to 590.687 (*The board WILL provide reference books at the exam or they can be viewed from the Boards web site prior to the exam*)

Main areas of knowledge to be tested:

Nevada statutes and regulations regarding LP-Gas

Number of questions:

Minimum of 25

Sample test questions:

Sample Question 7

If you are a business not engaged in the sale of LPG, but engaged in the sale and installation of gas-consuming appliances, piping, apparatuses, fixtures and connections; then what general class of license is required from the Board?

- A) Class 1
- B) Class 2
- C) Class 3
- D) Class 4

Sample Question 8

Licensed firms must have insurance against liability for injury to persons and damage to property.

- A) True
- B) False

HELPFUL INFORMATION

Approximate Properties of LP-Gases	Commercial Propane
Vapor pressure in psi (absolute pressure) at	
70° F	145
100° F	218
105° F	233
130° F	315
Specific gravity of liquid (water = 1) at 60° F	0.504
Initial boiling point at 14.7 psia, °F	-44
Weight per gallon of liquid at 60° F, lb	4.20
Specific heat of liquid, Btu/lb at 60° F	0.630
Cubic feet of vapor per gallon at 60° F	36.38
Cubic feet of vapor per pound at 60° F	8.66
Specific gravity of vapor (air = 1) at 60° F	1.50
Ignition temperature in air, ° F	920 - 1120
Maximum flame temperature in air, ° F	3595
Limits of flammability in air, percent of vapor in air-gas mixture	
Lower	2.15
Upper	9.60
Latent heat of vaporization at boiling point	
BTU per pound	184
BTU per gallon	773
Total heating values after vaporization	
BTU per cubic foot	2,488
BTU per pound	21,548
BTU per gallon	91,502

- Detailed instructions on pipe sizing can be located in NFPA 54 (2006) Annex C

- Detailed instructions on vent sizing can be located in NFPA 54 (2006) Annex G

Answers to sample exam questions:

- 1) 21,548 [NFPA 58 (2004) Table B.1.2 (a)]
- 2) A [Industry knowledge]
- 3) C [NFPA 54 (2006) 3.3.6.3]
- 4) B [NFPA 54 (2006) 10.27.3]
- 5) D [NFPA 54 (2006) 10.22.1]
- 6) D [NFPA 54 (2006) Table F.1 (b)]
- 7) C [NRS 590.575]
- 8) A [NAC 590.270]